



1000707

**KEYSTONE STEEL AND WIRE PLANT (ILD 000 714 881)**

The Keystone Steel and Wire Plant (Keystone) facility is located at 7000 South Adams Street in Peoria, Peoria County, Illinois. The facility is just east of U.S. Route 24, south of the intersection of Route 24 and Route 474, and directly adjacent to the west bank of the Illinois River. Keystone has operated at this facility since about 1900. The facility occupies 1,410 acres, but the actual manufacturing area is much smaller. The surrounding area is industrial and residential. The facility manufactures iron and steel products, including semifinished and finished wire products, nails, barbed wire, and fence wire. The PR/VSI performed by EPA identified several SWMUs and AOCs.

A possible release was scored for the groundwater route because of extensive soil contamination in and around many of the SWMUs. Some of these units are unlined and pose a definite threat to contaminate the groundwater. The depth to the shallow aquifer is about 10 feet, and this aquifer is assumed to be used as a "possible" source of drinking water. Groundwater flow is directly toward the Illinois River.

An observed release was scored for the surface water route because at one time, many of the SWMUs discharged illegally to the Illinois River. Sampling of this surface water has been conducted, and elevated levels of heavy metals have been detected, along with numerous fish kill incidents. The Illinois River is directly adjacent to the facility boundary. The river was classified as a "possible" drinking water source for Peoria.

The air route score was based on uncontrolled releases of EAF dust to the atmosphere due to poor baghouse operation in the past. Many of the surface impoundments and treatment lagoons are open to the atmosphere, resulting in possible releases to the air. Also, there is an on-site sensitive environment that could be impacted by a release of hazardous substances.

An observed release was scored for the on-site soils route because of extensive soil contamination. The site, however, is inaccessible. The on-site sensitive environment was a major factor in the determination of the score for this media.

**Reference:**

EPA. 1989. RFA Report Summary for the Keystone Steel and Wire Facility in Peoria, Illinois. September 1989.

RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

KEYSTONE STEEL AND WIRE

EPA SITE NUMBER: ILD 000714881

PEORIA, IL

SCORED BY: NICK NIGRO

OF PRC EMI

ON 08/23/91

GROUNDWATER SCORE : 39.62

SURFACE WATER SCORE: 68.41

AIR ROUTE SCORE : 31.37

ONSITE SCORE : 25.00

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MIGRATION SCORE : 44.32

WS-1 GROUNDWATER ROUTE

IS THERE AN OBSERVED RELEASE? P

ROUTE CHARACTERISTICS

DEPTH TO AQUIFER (FT.) : 10

NET PRECIPITATION (IN.) : 1

PHYSICAL STATE: LIQUID, GAS, SLUDGE

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTENCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0  
DRUMS : 0

LARGE STORAGE OR DISPOSAL AREAS ARE PRESENT

TARGETS

GROUNDWATER USE: POSSIBLE DRINKING WATER

DISTANCE TO WELL (MILES): 2.5

WS-2 SURFACE WATER ROUTE

RELEASES

IS THERE AN OBSERVED RELEASE? Y  
IS THERE A PERMITTED OUTFALL?  
HAVE THERE BEEN PERMIT VIOLATIONS?

ROUTE CHARACTERISTICS

FACILITY LOCATION: NA  
24-HOUR RAINFALL: NA  
DISTANCE TO SURFACE WATER (MILES): NA  
PHYSICAL STATE: NA

CONTAINMENT: NA

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTENCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0  
DRUMS : 0

AMOUNT IS LIKELY TO BE LARGE

TARGETS

SURFACE WATER USE: POSSIBLE DRINKING WATER OR RECREATION  
DISTANCE TO INTAKE OR CONTACT POINT (MILES): 0.4  
DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 0.4

WS-3 AIR ROUTE

RELEASES

IS THERE AN OBSERVED, UNPERMITTED, ON-GOING RELEASE? N

DOES THE FACILITY HAVE AN AIR OPERATING PERMIT(S)? Y

HAVE THERE BEEN ANY PERMIT VIOLATIONS OR ODOR COMPLAINTS BY RESIDENTS? Y

CAN CONTAMINANTS MIGRATE INTO AIR? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: K061; TCA

TOXICITY/PERSISTENCE VALUE: 3

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS:	0
DRUMS :	0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

POPULATION: RESIDENCES ARE LOCATED WITHIN FOUR MILES

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 0.4

WS-4 ON SITE CONTAMINATION

ACCESS TO SITE: INACCESSIBLE

IS THERE AN OBSERVED SURFACE SOIL CONTAMINATION? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: HEAVY METALS

TOXICITY/PERSISTENCE VALUE: 3

TARGETS

DISTANCE TO RESIDENTIAL AREAS (MILES): 0.20

IS THERE AN ON-SITE SENSITIVE ENVIRONMENT: Y

**FILE COPY**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA Facility Assessment Summary

Keystone Steel and Wire

Peoria, IL

ILD 000 714 881

September, 1989

1. Introduction

A RCRA Facility Assessment (RFA) was completed for Keystone Steel and Wire, Bartonville Plant in Peoria, Illinois. The main objective of the RFA was to determine whether there is sufficient evidence of, or the potential for, a release of hazardous waste or hazardous constituents. Evidence of a release would require the Keystone Group to undertake additional investigations to characterize the nature, extent, and rate of migration of the contaminant releases of concern. With information gained from the investigation, appropriate corrective measures can then be undertaken. The reasoning for additional investigations is to protect human health and the environment.

The RFA for Keystone included: (1) a Preliminary Review (PR) of all available files, and (2) Visual Site Inspections (VSI) on October 27, 1987 and November 10, 1987, and (3) a Sampling Visit (SV) on December 8th and 9th 1987.

The PR and VSI revealed that the Keystone facility has several Solid Waste Management Units (SWMUs) which need further investigation.

2. General

The following is a summary of the main activities of the facility and a brief description of the waste products and the solid waste management units of concern.

The Keystone Group, Bartonville Plant is located at 7000 South Adams Street, Peoria County, Peoria Illinois 61641. The facility is just east of U.S. Route 24, south of the intersection of Route 24 and Route 474, and about one mile west of the Illinois River. Keystone has operated at this site since around 1900. The facility occupies about 1410 acres. The actual manufacturing area is much smaller. The surrounding area is industrial and residential.

This facility manufactures iron and steel including semi-finished and finished wire products, producing nails, barbed wire, and fence wire. Hot rolled iron and steel products and cold drawn carbon steel wire are the main production methods.

In Keystone's original Part A, listed wastes included: K061, K062, and K063. The K063 has been delisted. The process codes for K061 include

S03 and D80. The K062 has process code T04. There are presently no RCRA units at the facility. Keystone successfully had their Part A withdrawn due to protective filing a delisting. However, RCRA enforcement has pursued clean-up of earthen ditches which were used to send spent pickle liquor (K062) to the WWTP. The earthen ditches were essentially surface impoundments, resulting in Keystone being in violation of RCRA and now having interim status. Keystone is not seeking a permit, although they are a generator.

Up until October 1, 1986, sulfuric and hydrochloric waste acids used in cleaning and galvanizing were diluted with large quantities (5,000,000 gallons/day) of plant water before discharge into the surface impoundments. This was discharged to the Mid-Mill Ditch and South Ditch via a drainage ditch. The water flowed from the North Ditch (impoundment), to the Mid-Mill Ditch to the South Ditch. From the South Ditch the wastewater, via sump pump, was placed in the 24 hour retention reservoir (see attached maps). Before this water was sent to Keystones WWTP, it was again mixed with more water. The South Ditch was eventually dredged, leaving two "hazardous" piles.

The facility managed a K061 (electric arc furnace) (EAF) landfill from 1970-1976, closure in 1978, was monitored by IEPA and permitted by Army Corp of Engineers; One million cubic feet were disposed; Groundwater monitoring of the landfill was concluded in 12/7/81. K061 was sent to PDC from 1980. Keystone has been cited for numerous violations concerning uncontrolled escape of EAF dust to the atmosphere due to poor baghouse operations through 1982. Questions exist regarding prior management of other hazardous wastes generated onsite, ie: K062 waste prior to operation of treatment plan in 1969 and F002 listed wastes.

### 3. Geologic and Hydrologic Setting

On the Keystone property there is about a 1% slope in the flats towards the River. The Bartonville Area, north-west of U.S. 24, has more relief. The Keystone Industrial Area is on a alluvial fan 10-20 feet above the water level of the Illinois River. This area is classified as Cahokia Alluvium, fine grained, poorly sorted sand or clayey silt 10-40 feet thick with sand lenses overlying shale bedrock, of the Carbondale/Modesto Formation (Middle Pennsylvanian). A clean sand and gravel aquifer (Sankaty Sand (Pleistocene)) supplies water for Keystone Steel and Wire. The groundwater flow generally trends toward the south-east or towards the River. The site is located in a wetland area in the flood plain of the Illinois River and would be affected by a 100-year flood event.

In 1986, Keystone installed 11 groundwater monitoring wells for one-time monitoring. Six wells were set at the water table (W-1, W-6) immediately around the K062 discharge/storage ditches. The other five wells (W-1D, W-5D) were set around 50 feet or at the shale bedrock surface.



#### 4. Waste Characterization

K061 (EAF)/Disposal at Peoria Disposal Co. (PDC)  
K062/Storage and Treatment (Neutralizing) including surface impoundments,

D001 (Solidified Paint Waste)/Disposal at PDC,

F002- 1,1,1, TCE still Bottoms. In 1983, 858 gallons of still bottoms went to ESL landfill in Joliet. F002 is currently permitted for acceptance at McKesson Chemical Company for recovery. There is no record of material manifested there. Before 1983, it is unknown how Keystone managed this waste.

Machine Shop Dust - Disposal at Tazewill County Landfill,  
Drawing Compound & Waste Lime - disposal at PDC,  
K062 Waste water Treatment Sludge - disposal onsite in surface impoundments.

K061- Baghouse for Electric Arc Furnace (EAF) Dust. Generation of K061 waste began around 1970. The dust is presently collected in a baghouse and sent off-site for disposal. Prior to this, between about 1970 to 1976, K061 was landfilled. This landfill was covered and closed in 1978 under U.S. Army Corp and IEPA supervision.

K062- Wastewater treatment plant for Spent Pickle liquor and all facility waste waters. The wastewater treatment plant was built in 1969. Before this the spent pickle liquor was reportedly sent to the Illinois River via channels from the facility and through Mud Lake. Mud Lake is believed to be located somewhere south of the present day sludge lagoons. The Channels which were used to transport the K062 are presently undergoing clean closure under a RCRA enforcement action.

K063- Pickle Liquor Sludge Lagoons. The Pickle Liquor sludge was delisted in 1980. It is assumed that the north lagoon is active, with the south lagoon acting as a drying/dewatering pond. Both lagoons have a noticeable rust/orange bottom sediment.

Hazardous waste drum storage- There are three Drum storage areas (all less than 90 days), two for paint waste and 1,1,1,-trichloroethane, and one for PCBs and Asbestos.

The PCB/asbestos storage area is reportedly not now being used. PCB's were on site from transformers and hydraulic fluids. Keystone said the last PCB disposal was in 1981, and that a PCB transformer was disposed of in October of 1985.

Lead and zinc are used in production for galvanizing and would most likely be contained in the wastewater. Chromium, nickel, cadmium, barium are trace metals found on site, a by-product of production and are most likely contained in wastewater. Methyl ethyl ketone (MEK),

toluene, benzene are from paint waste and are drummed. 1-1-1 trichloroethane is used as a cleaner/degreaser and is drummed. Vinyl chloride and methylene chloride are used for nail coating. Finally, small quantities of naphthalene are on site, used as a cleaning solvent.

## 5. Specific Unit Summary

Keystone has apparently not operated any hazardous waste management units under interim status with the exception of the earthen ditches closed under RCRA enforcement activities.

### SWMUs

S03- K061 waste pile, 300,000 cubic yards  
 D80- K061 Landfill, 180 acre feet  
 T04- K062 Tank, 20,000 gal/day treatment (lime neutralization and pcp)  
 D83- Surface Impoundment for K063, 36,500,000 gallons

Keystone at one time generated 10,000 gal/day of waste pickle liquor (K062) which was pumped to the WWTP (20,000 gal/day capacity) with other liquids (Stormwater) on site. Acidic waste was pre-neutralized to pH-5, lime neutralized and solids precipitated in basin. K063 was pumped to sludge storage lagoons

Pre-existing units: K061 landfill closed in 1978; existing SWMUs: sludge disposal ponds used to dispose of sludge generated from treatment of K062 waste. No monitoring exists for either unit.

1. K061- Baghouse Electric Arc Furnace Dust  
 K061- Landfilled 1970-76 closed in 1978  
 K061- Waste Pile on Part A
2. K062 WWTP 1969  
 Mud Lake south of sludge lagoons  
 Channels under closure
3. K063 Pickle Liquor sludge lagoons  
 Delisted 1980  
 North Lagoon, South Lagoon, outflows NPDES
4. Hazardous Waste Drum Storage Area (by Production Buildings)  
 3 Areas less than 90 days  
 2 for paint & 1 for 1,1,1, TCE.
5. PCB, Asbestos Storage Area  
 1981 last PCB disposal  
 Last PCB transformer disposal in 1985
6. River Water Storage Pond (H-waste pond). This pond is supposed to contain only river water used in production; and also serves as an emergency fire reservoir.

7. Vertical tanks- The tanks reportedly contain production boiler oil. There is extensive "oil" staining and standing liquid within the containment area.
8. Mud Lake- an oil film on the water east of the path about 1000' south of the sludge lagoons.
9. Discarded drums- North of old K061 landfill across the canal and SW of production area its estimated that there are 100 scattered barrels, with many tipped on their sides, with a tar-like substance in several of them and an "absorbent" material in others. No free liquid was observed.

#### 6. Contamination

Along with waste listed in Section 4, of this RFA, D001, solidified paint waste is produced, but was not listed as such in the Part A or in the list of potential contaminants listed in Section 4. Listed non-hazardous wastes include: Machine shop dust, drawing compound and waste lime, and the delisted WWP pickle liquor sludge (K063).

Prior to construction and operation of WWP in 1968, the process wastewaters (K062) were discharged through a drainage channel eventually leading to the Illinois River. Supposedly there may be 7 foot deep sludge deposits through the entire Mud Lake Area.

Sheen on the drainage channels, poorly constructed secondary containment around the storage tanks, and generally poor housekeeping practices, and discharges from the sludge lagoons and waste ponds were identified as the most probable sources of pollution. Surface runoff would enter the drainage network that empties into the Illinois River.

At the southern end of the facility; PDC removed, analyzed, and disposed of the waste solvents and odorous oily waste. Three drums were said to contain waste toluene and xylene, with 10 drums of solidified paint/tar sludge, and 20 cubic yards of contaminated soil were said to be removed.

On December 8th and 9th, 1987, a SV consisting of a total of 23 samples were collected, by Metcalf and Eddy, Inc. (M&E) personnel, from several areas around the facility, as specified in the U.S. EPA sampling plan for Keystone.

Based on the sampling results, several areas are identified as having significant contamination, suggesting that a release of hazardous constituents to the environment has occurred.

In the surface water samples lead, chromium, and cadmium were detected. Lead was consistently appearing in almost every water sample with the highest value topping out at 1890 ug/ml. The sludge sample showed both chromium and lead. Organics detected at the site included 1,1,1, TCE;

Trichloroethylene, tetra chloroethane, toluene, xylenes, 1-1-dichlorethane, tetra-1-2 dichlorethane, and the pesticide Arochlor-1254

In the soil samples, elevated levels of heavy metals were found ranging from 102 ppm to 12,700 ppm for lead; 54 ppm to 529 ppm for chromium; and from 13 ppm to 96 ppm for cadmium. Most of these levels were twice as high as the concentrations detected in the background soil samples.

## 7. Conclusions

### Chronological History

- 11/14/80 - Part A Submitted
- 5/22/81 - CERCLA Notification of landfill
- 8/6/81 - Keystone's K063 waste temporarily exempted as a listed RCRA Hazardous Waste based on 2/13/81 delisting petition.
- 6/28/82 - Keystone requests withdrawal of Part A based on generator status & delisting of waste stream (K063).
- 2/15/83 - U.S. EPA grants Keystones request to withdraw Part A.
- 6/21/83 - A CERCLA PA/SI was conducted, oxides of Cd, Cr, Pb, Ni, and Zn were discovered in the river flood plain.
- 6/5/84 - U.S. EPA excludes K063 from listing as a RCRA Hazardous Waste.
- 6/28/85 - U.S. EPA issues Complaint & Compliance Order regarding Keystone's failure to submit a complete Part A & the omission of facts that resulted in U.S. EPA granting Keystone's request to withdraw Part A. (Order based on IEPA referral of 1/8/85). U.S. EPA Referral to Department of Justice (DOJ) 3/10/86. Violations included storage of K062 in earthen ditches, holding ponds and aeration basin. Penalty was set at \$232,000 against Keystone.
- 1/8/85 - IEPA disclaimed Keystones exemption status.
- 10/15/85 - Keystone's Part B Permit Application submittal due, Part B called in by U.S. EPA on 4/15/85.
- 4/4/86 - IEPA site visit and subpart F inspection
- 12/8/87 - U.S. EPA RFA Sampling Visit

The facility was under enforcement action initiated by IEPA referral. As a result a Complaint and Compliance Order was issued by U.S. EPA in June 28, 1985 (refer to Docket No. V-W-85, R-3). Major violations

consist of not fully describing or including all hazardous waste activities on Part A permit application and subsequently violating related interim status standards for these activities, particularly subpart F Groundwater Monitoring.

The DLPC was concerned with the proper closure of ditches (that received wastewater discharges), holding ponds, (earthen) aeration basin, and the waste piles that were issued a permit for construction. The IEPA wanted the U.S. EPA to continue civil action to require proper closure of the facility under RCRA.

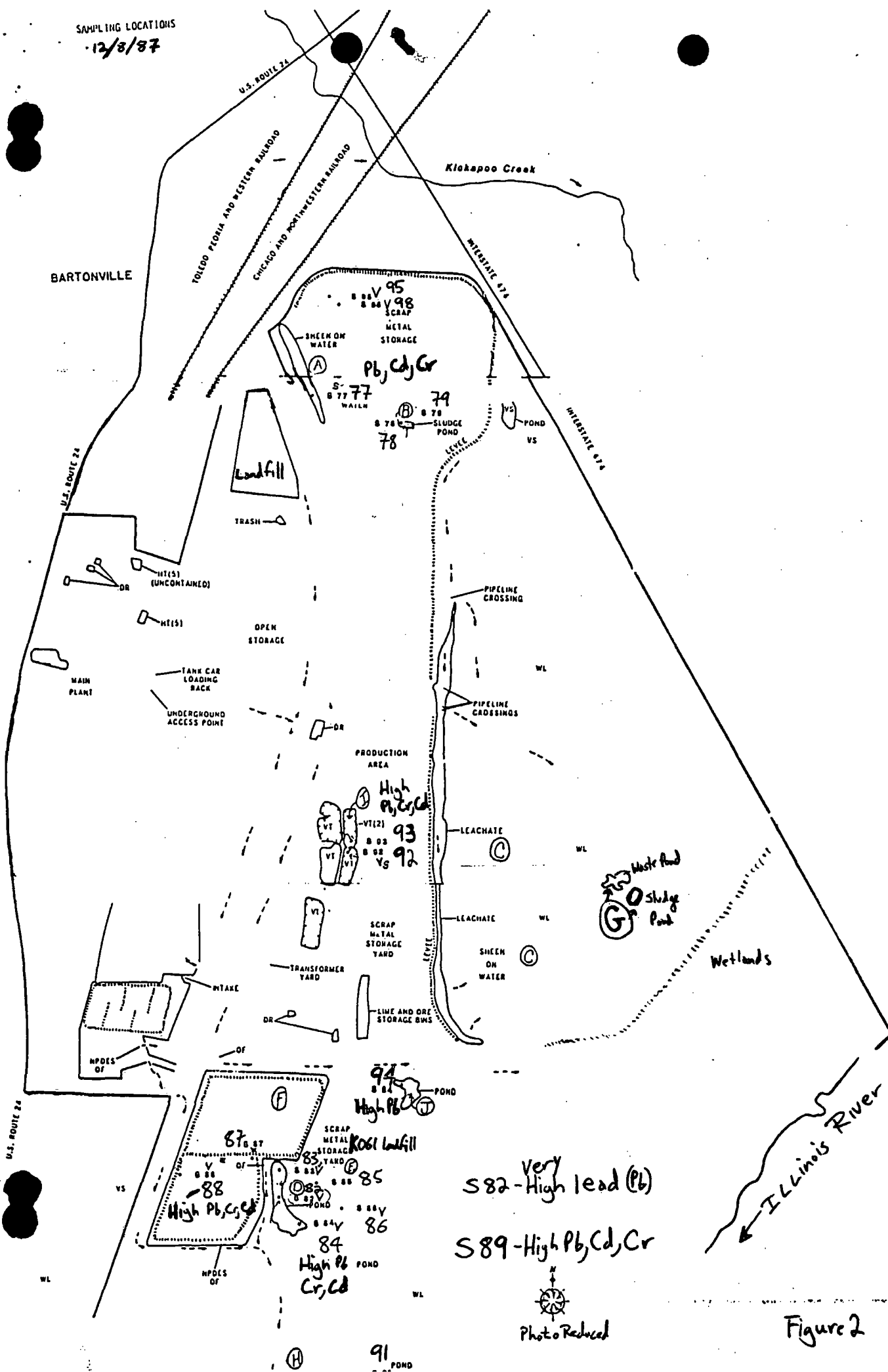
K061 landfill is a definite SWMU that needs to be pursued for corrective actions. This area should be one of the highest concerns because of the indiscriminate dumping of a variety of hazardous materials with release to the F-pond, the surrounding wetlands and the Illinois River.

Facility records reveal that this site has made every attempt in the past to claim exemption from RCRA permitting including omission of information from request to withdraw Part A, resulting in approval of the request by U.S. EPA based on false/inadequate information. In addition, no certification of SWMUs or of compliance with subparts F, G and H has been received by this Agency, as required by the HSWA of 1984.

This facility obviously needs a more extensive investigation of the environmental threat to human health and the environment. It appears based on the material that there is sufficient evidence to begin a RFI or proper closure of all areas of contamination.

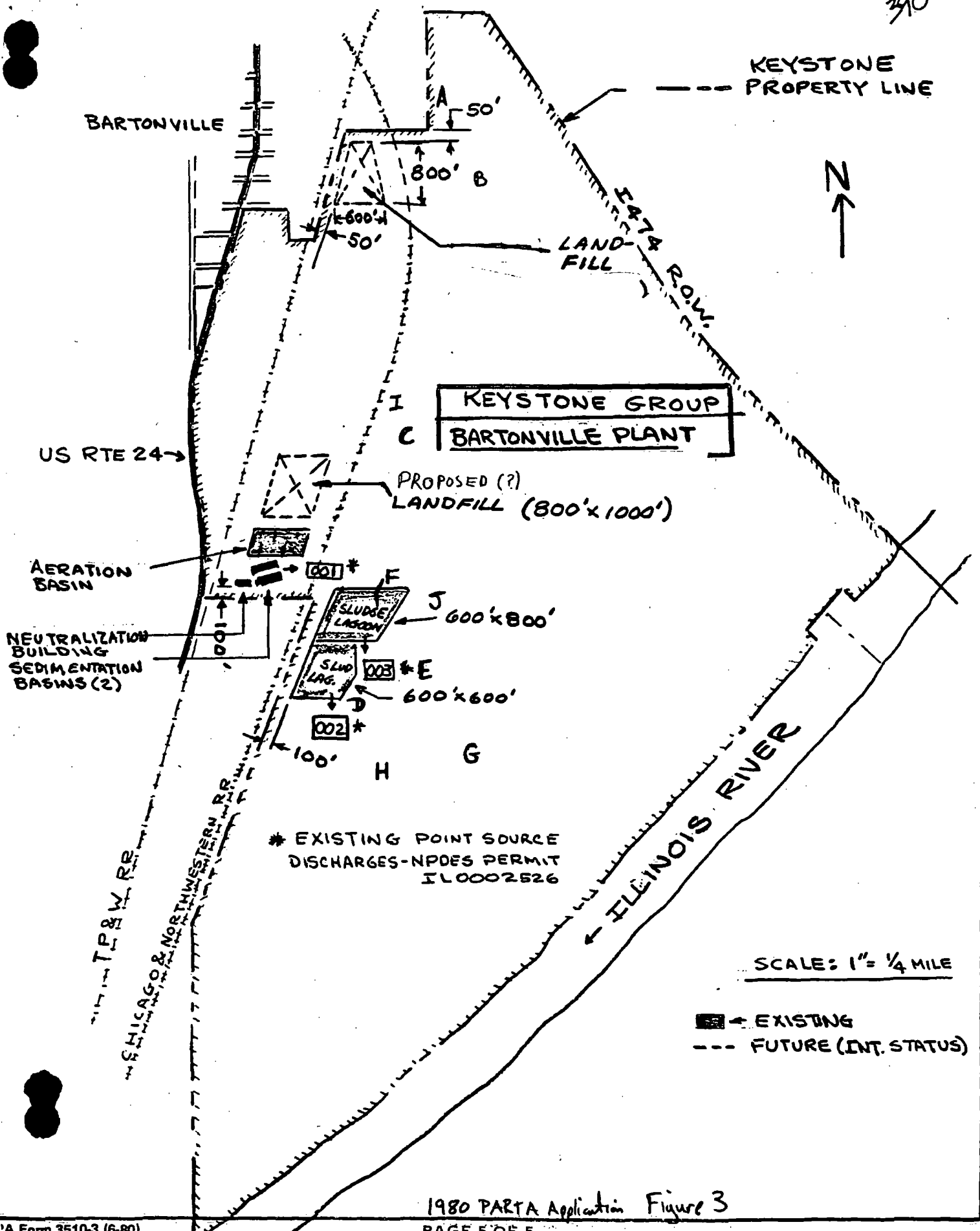


SAMPLING LOCATIONS  
12/8/87



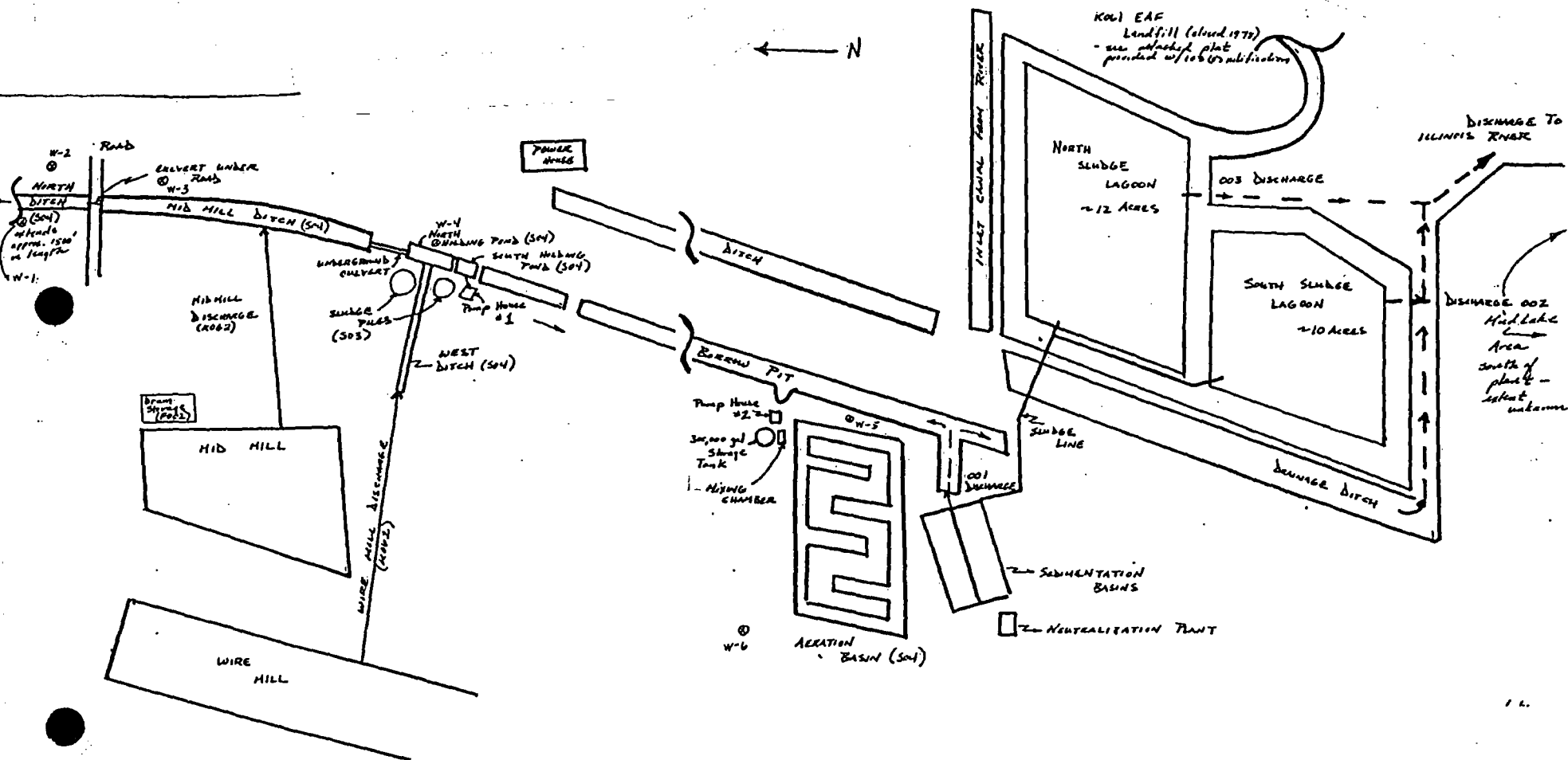
ACTIVITY DRAWING (see page 4)

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1980 PARTA Application Figure 3



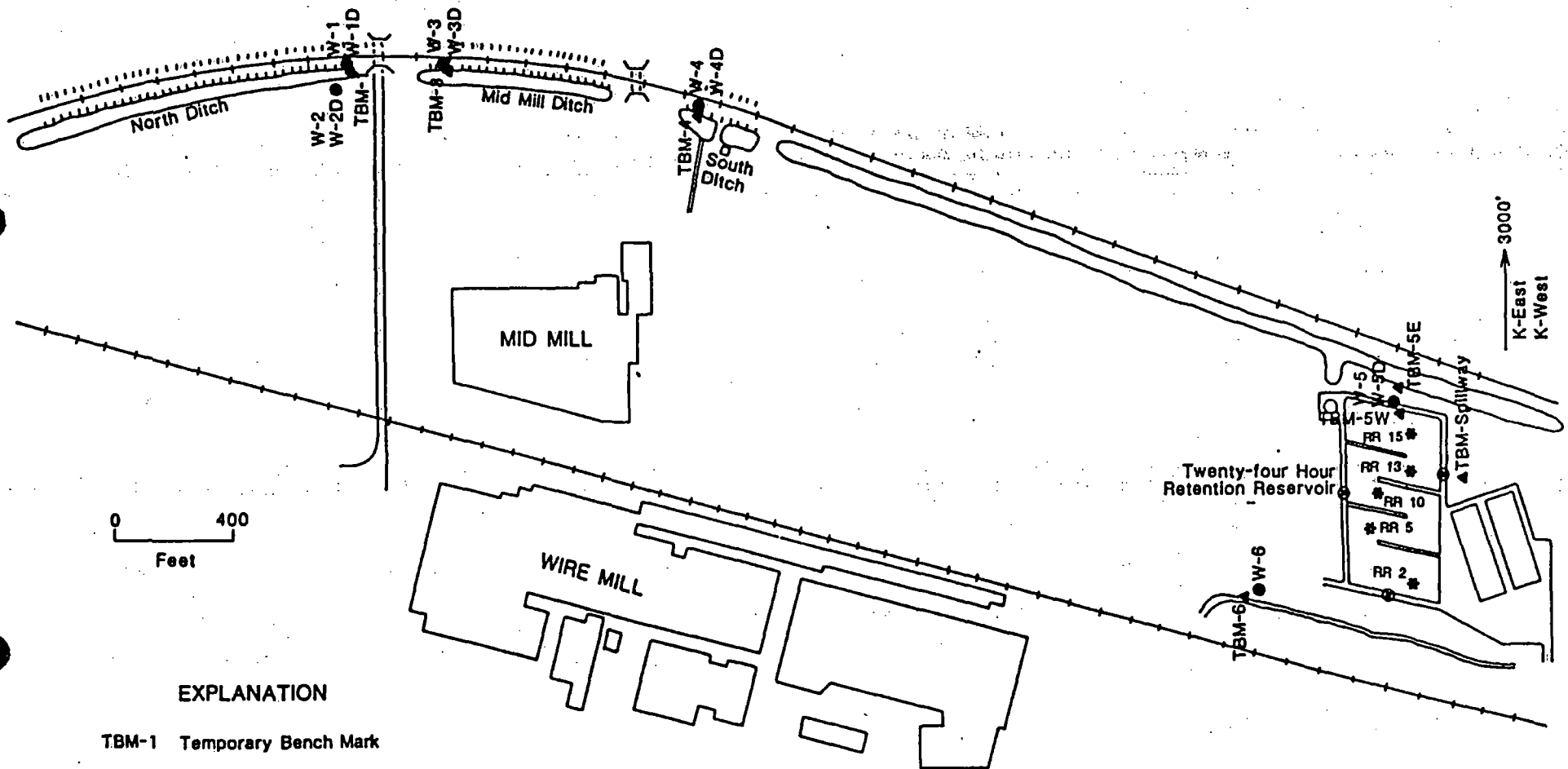


Keystone Group  
Bartonville Plant

Figure 4

# KEYSTONE STEEL & WIRE COMPANY

## LOCATIONS OF MONITORING WELLS AND SHELBY TUBE SAMPLES



### EXPLANATION

- TBM-1 Temporary Bench Mark
- W-1 Shallow Monitoring Well
- W-1D Deep Monitoring Well
- K-East Keystone Water Supply Well
- Proposed Monitoring Well
- \* Shelby Tube Sample Location

Geosciences Research Associates, Inc.  
627 North Morton Street  
Bloomington, Indiana 47401

MEMO TO FILES  
KEYSTONE GROUP VSI #2 - 11/10/87  
KEVIN J. MOSS

A second VSI for Keystone Group was conducted on 11/10/87. Several questions needed to be addressed following the first VSI. I stopped at Keystone on my return trip from Springfield, after attending a compliance meeting concerning Keystone. The VSI lasted from about 9:15 until 12:15. Dale Bennington, Manager Energy & Environmental Engineering, represented Keystone. We met in Mr. Bennington's office to address as many questions as possible before going out to the facility.

1) Keystone never filed a part B permit application, nor did they respond to the SWMU questionnaire. Because of this, I wanted to reconfirm all the acknowledged SWMUs. No changes from the last VSI report were noted, however, for completeness, I will again list all of Keystones acknowledged SWMU's (in bold type).

**K061 Baghouse** for Electric Arc Furnace Dust. Generation of K061 waste began around 1970. The dust is presently collected in a Baghouse and sent off-site for disposal. Prior to this, between about 1970 to 1976, K061 was **landfilled**. This landfill was covered and closed in 1978 under U.S. Army Corp and IEPA supervision. A K061 waste pile was listed on the part A, however, Mr. Bennington did not know of this waste pile.

COMMENTS: Will probably collect samples from atop and around the K061 landfill.

**K062 Waste water treatment plant** for Spent Pickle liquor and all facility waste waters. The waste water treatment plant was built in 1969. Before this the spent pickle liquor was reportedly sent to the Illinois river via channels from the facility and through an area called **Mud Lake**. However, it remains unknown where exactly this mud lake region actually is. Mud Lake is believed to be located somewhere south of the present day sludge lagoons. The Channels which were used to transport the K062 are presently undergoing clean closure under an RCRA enforcement action. The mud lake area is not presently being addressed.

**K063 Pickle Liquor Sludge Lagoons.** The Pickle Liquor sludge was delisted in 1980. At present the North Lagoon is active, with the south lagoon drying/dewatering (photos taken). Both lagoons have a noticeable rust/orange bottom sediment. Mr. Bennington said this is probably an iron residue.

COMMENTS: The outflows have NPDES permits. The IEPA has sampled these lagoons. Keystone samples the outflows weekly for lead, zinc, TDS, oil, grease, and pH. However, if time and finances allow, I would still like to collect samples from these lagoons.

**Hazardous waste drum storage** - There are three Drum storage areas (all less than 90 days), two for paint waste and 1,1,1,-

trichloroethane, and one for PCBs and Asbestos. As on the first VSI Mr. Bennington could not produce manifests for the F002 wastes.

Comments: Questions still exist concerning the pre-1983 disposal of F002 wastes. I will recommend that the IEPA pursue this.

The PCB/asbestos storage area is reportedly not now being used. PCB's are on site from transformers and hydraulic fluids. Mr Bennington said the last PCB disposal was in 1981, and that a PCB transformer was disposed of in 10/85. The area is reportedly being kept open for precautionary storage only.

I was not able to visit the south drum storage area for 1-1-1 trichloroethane on the first VSI. This time we drove by the area. Inspection of the drums and storage time will be left to the IEPA. The storage area is well marked and appears well maintained. There were some large "containers" in front of the storage area which may impede access to the drums, however, the access was not completely blocked.

2) Keystone submitted a list of possible contaminants to RCRA enforcement per their compliance order. To assist in any future sampling at Keystone I wanted to identify the uses of these constituents and learn as much as possible about Keystone's present and past disposal activities.

lead zinc - used in production for galvanizing. Would most likely be contained in the waste water.

chromium, nickel, cadmium, barium - Trace metals, a by-product of production. Not used directly in any facility processes. Most likely contained in waste water.

methyl ethyl ketone, toluene, benzene - From paint waste. Drummed.

1-1-1- trichloroethane - cleaner/degreaser, drum storage.

trichloroethylene - Past use. No disposal history discussed.

Vinyl chloride, methylene chloride - used for nail coating, no waste generated.

Naphthalene - cleaning solvent, small quantities.

propargyl alcohol, fluorine - could not identify any present or past uses for these chemicals or wastes containing these constituents.

3) We discussed the product drum storage areas since the aerial photos noted staining at these areas. Mr. Bennington identified the drum storage areas and a general description of the materials



stored there. We revisited the west drum storage area. Below is a partial list of materials stored.

- \*Pebble quick lime/drawing compound
- \*oils, hydraulic fluids, grease, gear lube, etc.
- \*acid tanks - sulfuric and hydrochloric acids.

COMMENTS: I did not notice any extensive staining, nothing which would suggest a deliberate, routine, systematic release. The drum storage areas appeared well maintained and I do not foresee the need to sample here.

4) Vertical tanks - The tanks in question reportedly contain production boiler oil. I decided to visit this area after reviewing the aerial photos. The aerial photos noted that the two southern and eastern most tanks had an appreciable amount of 'oil' staining and accumulated liquid. There is extensive, and what appears excessive "oil" staining and standing liquid within the containment area (photos taken). ~~A~~

COMMENTS: Samples should be collected from this area.

5) River water storage pond (H-waste pond on the aerial photos). This pond is supposed to contain only river water used in production; and also serves as an emergency fire reservoir. Four addition (besides the river inlet) small streams of liquid were observed entering the pond (photos taken). Mr. Bennington could not identify the origin or composition of these streams. They did, however, look innocuous enough. Besides traces of oil observed in the water and a fishy smell (river water) nothing appeared out of the ordinary.

Comments: Based on no prior mention of this pond in any state inspection reports and observations made during the VSI, this pond does not appear to be of concern. No sampling will be done on this pond.

6) On the first VSI I noticed what appeared to be some method of land treatment atop the old KOSI landfill (see first VSI report). Mr. Bennington said they were cleaning the disks and were going to plant grass.

Comments: Considering the time of year, the location of the landfill, and the general housekeeping of the facility, this scenario seems unlikely. It is possible that in the closure plan for the landfill it was stipulated that the cover must remain vegetated. This may help validate the above scenario, but it seems unlikely.

7) A-1 Pond - A large pond north of the WWTP, designated A-1 pond on the aerial photos. This area is completely fenced in. Mr. Bennington said we could enter if needed. I was able to look through the fence at three different locations and did not see anything out of the ordinary so I decided a closer look was not needed.

COMMENTS: No sampling need be done at this location. Any contamination noted on the aerial photos no longer appears to be present. A RCRA enforcement action is looking at this area as a whole, but not this pond specifically. It is my judgment that any contamination in this pond originated from those areas being specifically investigated by the compliance order and no sampling is necessary.

8)Mud Lake - I started to walk through this area to look for anything reflective of contamination: stressed vegetation, barren areas, dump areas, etc. However, this area is very large and it would of been superfluous to try to cover the whole area. I walked down a sandy road, south of the sludge lagoons. From this vantage point I could not see anything out of the ordinary. I did, however, notice an oil film on the water east of the path about 1000' south of the sludge lagoons(photo taken).

Comments: Will probably sample the water with the oil film. The area is a wetland/grassland and is used for hunting by Keystone employees. The oil film may have originated from boats(boat motors) used for hunting. It was duck hunting season during the VSI. However, if the Groundwater flow is towards the east/southeast (I assume the groundwater flow is towards the river), any contamination from the west (again I assume the approximate location of mud lake) may be picked up in the water sample. If nothing else, if any significant contamination is noticed elsewhere on the facility, in my 3008h report I will suggest that this area be more thoroughly examined.

9)Discarded drums - A drum area identified on the aerial photos was not investigated on the first visit. The area in question is north of the old KO61 landfill, across the canal and northwest of a large concentration of discarded barrels southwest of the production area. The area in question can be seen on the aerial photos. At this location is an estimated 100 scattered barrels, with many tipped on their sides(photos taken). I observed a tar-like substance in several of them and an "absorbent" material in others. No free liquid was observed. Mr. Bennington said he was unaware of the existence of these barrels.

COMMENTS: I do not plan to sample the soils in this area. I called John Tripses of the IEPA, the state investigator for this site, and he (IEPA) will follow-up on the cleanup of these barrels.

We also visited the area where drums were discarded by a past leaseholder at the southern end of the facility; east of the old Laidlaw building. IEPA monitored the clean-up of this area. PDC removed, analyzed, and disposed of the wastes. The wastes were generally described as solvents,oily, and odorous. Mr. Bennington said there were 3 drums of waste solvents/flammable liquid(toluene, xylene), 10 drums of solidified paint./tar sludge, and 20 cubic yards of soil removed. No drums or any evidence of releases, stressed vegetation, stains, were noticed.

MEMO TO FILES  
KEYSTONE GROUP VSI REPORT  
KEVIN J. MOSS

A VSI for Keystone group was conducted on 10-27-87 by U.S. EPA representatives Kevin J. Moss and Gale Hruska. Dale L. Bennington (Manager, Energy & Environmental Engineering) and Richard W. Tinsley (Manager, Safety and Health) represented Keystone Group.

D. Bennington began by stating that on request of Keystone's legal council he could not divulge any information concerning past waste disposal activities. This was agreed to by K. Moss after stating that if deemed necessary the U. S. EPA could pursue other avenues to try to gain this information.

We started by identifying the wastes generated by Keystone, including their disposal activities. Keystone generates K061, K062, F002, and D001 waste. K063, listed on Keystone's original Part A, has been delisted. The K062 is treated on-site by Keystone's waste water treatment facility. K061, F002, and D001 wastes are drummed, stored less than 90 days, and disposed of offsite. This agrees with Keystone's original Part A and IEPA ~~reports~~ reports. Some gaps in Keystone's waste disposal record remain unanswered. Mr. Bennington said he did not know of K062 disposal activity prior to 1969, nor to F002 wastes prior to 1983. However, an IEPA report states that K062 was discharged directly to the Illinois river, via channels, through an area termed "mud lake". Mud lake is believed to be located south of the present sludge lagoons. The actual geographic extent of mud lake is unknown. It is reported that deposits of K062 of up to 7' may exist in the mud lake region. D. Bennington did say he could produce manifests for the F002 wastes prior to 1983 if needed. Possible waste contaminants also mentioned by D. Bennington include: small amounts of solvents from shop repairs, Methylene chloride from the vinyl coating of nails, waste oil, and PCBs from active transformers and hydraulics. These wastes are said to be drummed and transported offsite for treatment and/or disposal. Consideration should also be given to several other compounds, identified by Keystone as potential contaminants, listed in the SEDIMENT TREATMENT PROPOSAL submitted to RCRA enforcement (Attachment 1).

A brief discussion of Keystone's hazardous and non-hazardous waste water treatment facilities followed. This process is currently under a RCRA enforcement action so this discussion was not pursued any further.

Keystone's container storage practices were discussed next. Two areas were initially identified, one at the south complex and another at the north end of the main plant (wire mill). A third area, for asbestos and PCBs, was identified during the site inspection. The main plant area is mainly used for waste Trichloroethylene. The south complex was not visited, so I am unsure what is stored in this area. The asbestos and PCB



storage area reportedly has no PCBs at present, but has in the past. Barrels of a corrosive water treatment chemical was observed in the structure.

In a discussion I had with John Tripsys of the IEPA, (prior to the VSI, concerning Keystone's waste disposal activities) he mentioned an agreement between Keystone and the IEPA concerning barrels left on site by a former leasee in the S, SW corner of the site. Keystone representatives could not remember such an agreement. They did, however, identify several present lessors in the S, SW area (attachment 2). This area was not visited.

A pond identified as a waste pond by aerial photos (FIG. 4) was identified by D. Bennington as a river water storage area used for production and as a reservoir for fire safety. According to D. Bennington this pond contains only river water and once it is used in production (process) it is discharged to the waste water treatment facility.

Two proposed landfills (Figs. 3 and 4, aerial photos) were identified as excavation areas by D. Bennington with no past or present waste disposal activities (see below).

The remainder of the areas in question required physical site inspection.

An area in the N, NW identified as a water body with sheen (Fig. 3 and 4, aerial photos) revealed a dried depression with a large amount of solid debris (construction/demolition) but no evidence of any "sheen".

A quick look at the aforementioned north most proposed landfill was accomplished by hiking up the railroad embankment from the "sheen" pond. Nothing out of the ordinary could be seen from this distance.

East of the "sheen" pond is an area identified as a sludge pond (Fig. 3 aerials photos). This pond is an excavated depression into rock/ debris containing copious amounts of an oily substance. Keystone personnel said they were unaware of the contents of the pond, or disposal activities in this area, as this area has been leased out, to Scrap Products Co.

Vegetated stress areas east of the "sludge pond" and bermed areas (Fig. 4 aerial photos) are topographically low areas which may be subject to frequent flooding. The northern most area contains a stand of medium sized trees which are now dying. There are roads leading to and from this area and a several small piles of mill scale in this area.

The trash area (Fig 4) appears to consist of construction /demolition degree.



Outside drum storage areas identified by aerial photos (Figs 4 and 5) consist of: two product storage areas, two former product storage areas, and two others identified by Keystone personnel for scrap/disposal. The product storage area NE of the main plant has had spillage. Aerial photo interpretation identified spillage at the other product storage area, although none was apparent upon visual inspection.

Five horizontal tanks north of the main plant (Fig. 4) were used for waste oil storage and are reported, and appear to be, no longer in use. Five other horizontal tanks east of the main plant reportedly are no longer in existence due to road construction.

The vertical tank area (Fig. 4) was not investigated since these were identified by Keystone personnel as holding production materials.

Leachate and sheen areas in the channel east of the production area (Fig. 6) were not apparent upon inspection. However an area of white film and a possible sheen were noted. Across the pond a rusty-oily film was noted. This entire area was identified as a recycling cooling pond for production. D. Bennington stated that this water should not become contaminated during the production process. He also stated when questioned that contamination could not be ruled out entirely.

The south end of the southern most scrap metal storage yard (Fig. 5) is the site of the old K061 landfill. There appears to be some sort of land-treatment activity presently occurring, evidenced by freshly disked soil and "treatment" machinery. Keystone personnel said they were unaware of any such activity. The pond to the S, SW contains a white precipitate around the center area and a rusty-oily substance at the SE corner. A pond east of the scrap metal storage yard and south of the canal has a very noticeable green bottom.

The slag and debris area (Fig. 7) is leased to Inter Mill Service. They process the slag for Keystone. The waste pond (Fig. 7) has a green bottom as does the sludge pond (Fig. 7). Both areas are constructed/excavated into solid debris. A pond south of the sludge pond has a white film and bottom sediment.

END

Waste wood (mainly old skids) was strewn around this area.

COMMENTS: As this clean-up was monitored by the IEPA I do not see any reason to sample here.

NOTES: 1) The north product storage area is now in a different location than that noted on the aerial photos.

X 2) Keystone has been in operation at this site since approximately 1900 not 1955 as reported in the FMP report.

3) Photos were also taken of the "oil pond" and the vegetated stressed area in the NE corner of the facility (see the first VSI report for a description of these areas).

4) All photographs are kept under separate cover in the RFA folder.

END

RELEASED  
DATE 10/23/03  
RIN #         
INITIALS       

RECEIVED

MAY 02 1986

SOLID WASTE BRANCH  
U.S. EPA, REGION V

- |        |        |       |          |
|--------|--------|-------|----------|
| Peoria | Peoria | IL    | 61641    |
| City   | County | State | Zip Code |

- \*Based on existing Part A submitted 11/14/80 which was withdrawn on 2/15/83. (See Attachment 19-B: Executive Summary for actual regulated units).

<u>X</u>	Landfill	180 acre-ft.	closed
<u>X</u>	Surface Impoundment	36,500,000 gals.	unregulated
<u>X</u>	Waste Pile	300,000 cu. yds.	protectively filed for
<u>    </u>	Land Treatment		
<u>    </u>	Injection Wells		
<u>X</u>	Others (Specify) -T02	20,000 gal/day	unregulated
	-T04 (WWT Plant)	20,000 gal/day	active

7. Permit Application Status: 01\* (HWDMS action item  
\*See Attachment 19-B: Executive Summary number)

8. Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Facility: ( may attach Part A or permit list or reference those documents if listing of wastes is exceptionally long - in that case, to complete this question list wastes of greatest interest and/or quantity and note that additional wastes are managed)

<u>Type of Waste</u>	<u>Quantity</u>	<u>Generated, Treated, Stored or Disposed</u> <u>(note appropriate categories)</u>
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Part A enclosed as Attachment 19-A. For proper identification of hazardous wastes currently generated, treated, stored or disposed of on-site, refer to Attachment 19-B: Executive Summary.

9. Review of Response to Solid Waste Management Questionnaire indicates: (check one)

\*No response received from Keystone

☒ Solid Waste Management Units exist (other than previously identified RCRA units) based on file review done for Initial Screening (see Attachment 19-B)

☐ No Solid Waste Management Units exist (other than previously identified RCRA units)

☐ It is unclear from review of questionnaire whether or not any solid Waste Management Units exist

☐ Respondent indicates that does not know if any Solid Waste Management Units exist

10. If the response to question 9 is that Solid Waste Management Units exist, than check one of the following:

☐ Releases of hazardous waste or constituents have occurred or are thought to have occurred

☐ Releases of hazardous waste or constituents have not occurred

☐ Releases of hazardous waste or constituents have occurred or are thought to have occurred but have been adequately remedied

☒ It is not known whether a release of hazardous waste or constituents has occurred

11. The facility is on the National Priorities List or proposed update of the List or ERRIS list

\_\_\_\_\_ Yes - indicate List or update

\_\_\_\_\_ No

  X   Yes - ERRIS list

Prior to completion of the Recommendation portion of the Facility Management Plan, the attached Appendix must be completed.

12. Recommendation for Regional Approach to the Facility: Check one

  X   Further Investigation to Evaluate Facility

\_\_\_\_\_ Permit Compliance Schedule

\_\_\_\_\_ Corrective Action Order (may include compliance schedule)

  X   Other Administrative Enforcement

  X   Federal Judicial Enforcement

\_\_\_\_\_ Referral to CERCLA for Federally Financed or Enforcement Activity

\_\_\_\_\_ Voluntary/Negotiated Action

  X   State Action

Brief narrative in explanation of selection : \_\_\_\_\_

  See Attachment 19- B: Executive Summary  

a) If further investigation alternative is selected:

  X   Site inspection - anticipated inspection date to be determined

State or Federal inspection Federal

  X   Preliminary Assessment - anticipated completion date to be determined

\_\_\_\_\_ RI/FS - anticipated date of initiation \_\_\_\_\_

State/Federal \_\_\_\_\_

Private Party \_\_\_\_\_ identify party(ies)

## b) If Permit Alternative is Selected: Projected Schedule

Date of Part B Submission: \_\_\_\_\_

Date of Completeness Check: \_\_\_\_\_

Date for Additional Submissions (if required): \_\_\_\_\_

Date of Completion of Technical Review: \_\_\_\_\_

Completion of Draft Permit/Permit Denial: \_\_\_\_\_

Public Notice for Permit Decision: \_\_\_\_\_

Date of Hearing (if appropriate): \_\_\_\_\_

Date for Final Permit or Denial Issuance: \_\_\_\_\_

Description of any corrective action provisions to be included in permit -

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## c) If Corrective Action Order Alternative is Selected:

Estimated Date for Order Issuance: \_\_\_\_\_

Description of Provisions of the Order to be Completed by  
Facility: \_\_\_\_\_

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Description of Compliance Schedule to be Contained in Order:

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## d) If Other Administrative Enforcement Action is Selected:

See Attachment 19-C

Projected Date for Issuance of the Order: Complaint and Compliance Order  
issued 6/28/85Description of Provisions or Goals of the Order: enclosed

~~CONFIDENTIAL~~

\_\_\_\_\_

\_\_\_\_\_

e) If Judicial Enforcement Alternative Selected:

Date of Referral to Office of Regional Counsel: referred to the Dept. of Justice on March 10, 1986. Draft Civil Suit prepared and under review by USEPA-Region V.

f) If Referral to CERCLA for Action Selected:

Date of Referral to CERCLA Sections: \_\_\_\_\_

g) If Voluntary/Negotiated Action Alternative if Selected:

Date of Initial Contact with Facility: \_\_\_\_\_

Description of Goals of Contact or Discussions with Facility: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date for Termination of Discussions if Not Successful:

\_\_\_\_\_

Date of Finalization of Settlement if Negotiation Successful:

\_\_\_\_\_

h) If State Action Alternative is Selected:

Date for Referral to State: \_\_\_\_\_

Name of State Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

**EXECUTIVE SUMMARY: KEYSTONE STEEL & WIRE/ILD000714881**

Keystone Steel & Wire/Bartonville Plant, located in Peoria, IL, is an iron and steel manufacturer that commenced operations in mid-1955. The facility generates four known hazardous waste streams which include electric arc furnace dust (K061), 1,1,1-trichloroethane still bottoms (F002), spent pickle liquor (K062), and paint sludge (D001). Below is a summary of the wastes generated on-site, past management practices, and current waste management practices.

**K061 - Electric Arc Furnace Dust.** According to the CERCLA 103(c) Notification, K061 wastes were landfilled on-site from 1970 - 1976. The landfill was closed and covered in 1978. The closure of the landfill was monitored by the IEPA, and permitted by the Corp. of Engineers under Permit No. 3407802 (approximately one million cubic feet of K061 wastes were disposed of in a 90,000 square foot area landfill). Groundwater monitoring of the landfill was discontinued in December of 1981. A plat was filed with the County Recorder of Deeds for this closed site, pursuant to Rule 318(c) of Chapter 7. From 1980 to the present, Keystone has sent their K061 waste to Peoria Disposal Company #1 Landfill under IEPA Special Waste Stream Authorization No. 790213. However, additional surficial contamination from K061 dust dispersal may have occurred. Review of the IEPA/DAPC Field Inspection File reveals that Keystone has been cited for numerous violations concerning uncontrolled escape of EAF dust to the atmosphere due to impaired operation of their baghouse emission control system, particularly through late 1982. It appears that Keystone was only able to come into compliance after they had shut down one of the two furnaces due to poor business/financial conditions.

**K062 - Spent Pickle Liquor.** Spent pickle liquor generated from Keystone's rod cleaning and galvanizing operations (flash hydrochloric acid contact and hot dip galvanizing) is combined with other plant wastewaters, i.e., storm water run-off, cooling water, boiler blowdown and wastes from wire coating operations, including sodium hydroxide solutions for degreasing and etching; and is treated on-site prior to discharge to the Illinois River under IEPA NPDES Permit No. IL0002526. The mixture of process wastewaters are collected in the Midmill and Wire Mill plants' sewer systems and continuously discharged from a pipeline to a series of interconnecting ditches (Midmill Ditch, North Ditch and West Ditch) and holding ponds (North and South Holding Ponds). Pumphouse #1, located just west of the South Holding Pond, then pumps the waste waters through a 3000' cement asbestos pipe to a 300,000 gallon above-ground mixing chamber, where it is combined with recycled treated effluent waters. (Prior to establishing the treated effluent recycling system, the process wastewaters were mixed with river water. Due to exceedance of NPDES Permit limits established for the lead and zinc mass loadings in 1983, Keystone modified the sedimentation basin discharge flume with a device to divert the effluent back through the WWT plant in order to obtain the required reduction in volume of the effluent being discharged to the river.) From the mixing chamber, the wastewaters are discharged through a fountain to an earthen aeration or equalization basin, and then pumped to a neutralization tank for



treatment with lime and coagulents. The neutralized wastewaters flow to two concrete sedimentation basins from which the sludge is pumped to the sludge disposal lagoons and the subsequent effluents are discharged to the river (a total of three outfalls exist). Prior to the construction and operation of the Wastewater Treatment Plant in 1968, the process wastewaters containing spent pickle liquor (K062) were discharged directly to the wastewater ditch which flowed through a meandering channel across the swamp area south of the plant (Mud Lake area) and then entered the Illinois River. A memorandum on file with the IEPA's DWPC Field Office, dated 9/26/67, from William H. Busch to the NWRO file, references approximately 7' deep sludge deposits throughout the entire Mud Lake area. There is no further information on file with the IEPA regarding the excavation or removal of these wastes off-site by Keystone, or the actual area/extent of these deposits, or if these deposits extend beyond Keystone's property boundary (Keystone did not include these wastes on the 103(c) CERCLA Notification).

\* → **K062 - Sludge.** In addition to the untreated K062 sludge deposits noted in the above paragraph, Keystone is currently storing sludge/sediment dredged from the holding ponds in 1982 in two waste piles located on either side of the West Ditch.

**F002 - 1,1,1-Trichloroethane Still Bottoms.** The still bottoms are generated from the distillation of spent trichloroethane. Trichloroethane is used to degrease nails manufactured in the plant. The still bottoms are stored in drums, and are presently shipped off-site for recovery at Safety-Kleen in Elgin, IL within 90 days. During 1983, Keystone shipped 8,580 gallons of F002 still bottoms to ESL Landfill in Joliet, IL for disposal under IEPA Special Waste Stream Permit Authorization No. 812241. Keystone also secured a permit from IEPA, Authorization No. 921852, in June of 1982, for off-site storage at McKesson Chemical, Normal, IL; however, the permit was never used. It is unknown at this time how Keystone managed their F002 wastes prior to 1983.

**D001 - Solidified Paint Waste.** Paint sludge "solidified" with Dririte generated from the cleaning of the plant's paint dip tanks is sent to Peoria Disposal Company #1 Landfill under IEPA Special Waste Stream Permit Authorization No. 841365 (550 gallons were disposed of in 1984). A memo written by Dave Jansen, IEPA/FOS, documenting an inspection conducted on February 22, 1985, also referred to a conversation with Mr. Dale Bennington from Keystone on March 14, 1985, during which Mr. Bennington stated that the above described waste generated from the dip tank cleaning was the first time in many years.

#### **Miscellaneous Non-Hazardous Wastes:**

Machine shop dust - disposal at Tazewell County Landfill, IEPA Permit Number 781144.

Drawing compound and waste lime - disposal at Peoria County Landfill, IEPA Permit Number 831602.

K062 wastewater treatment sludge (previously identified as K063 listed

hazardous waste prior to the exclusion of K063 waste from listing under RCRA on June 5, 1984 by USEPA) - disposal on-site in ten and twelve acre surface impoundments.

NOTE: Refer to Attachment 19-B1 for locations of the above units.

Keystone submitted a Part A on November 14, 1980 to obtain interim status for waste pile storage (S03-300,000 cu. yds. of K061), landfill disposal (D80-180 acre-ft. of K061), treatment (T04-20,000 gal./day of K062), treatment in surface impoundments (T02-20,000 gal./day of K063), and disposal in surface impoundments (D83-36,500,000 gallons of K063). On August 6, 1981, Keystone's petition for delisting the K063 (sludge from lime treatment of spent pickle from steel finishing operations) generated and disposed of on-site was temporarily granted by USEPA (In June of 1984, K063 was formally excluded from listing as a RCRA hazardous waste). On June 28, 1982, Keystone formally requested the withdrawal of their Part A based on the above delisting action, the operation of the Wastewater Treatment Plant under IEPA NPDES Permit No. IL0002526, and their less than 90 day storage capabilities of the K061 waste prior to shipment off-site for disposal (notification for waste pile storage and landfiling of K061 was for protective filing purposes pending the security of off-site disposal permits). USEPA granted Keystone's Part A withdrawal request on February 15, 1983 based on the above information. Numerous RCRA inspections conducted by IEPA field personnel cited Keystone for a variety of interim status violations pertaining to the storage of K062 wastes in earthen ditches/holding ponds and aeration basin (S04), in addition to K062 sludge storage in waste piles (S03). In response to the IEPA's Compliance Inquiries, Keystone has repeatedly claimed exemption from RCRA regulation for these activities under 35 Ill. Adm. Code, Sec. 725.101(c)(9)-elementary neutralization unit, and Sec. 725.101(c)(10)-treatment/storage of hazardous wastes that are beneficially used, reused, or reclaimed under Sec. 721.106(a)-spent pickle liquor reuse. On January 8, 1985, the IEPA disclaimed Keystone's exemption status by referring the facility to USEPA for enforcement action. Based on the IEPA referral, USEPA issued a Complaint and Compliance Order (Docket No. V-W-85, R-3, enclosed herein as Attachment 19-C) to Keystone on June 28, 1985, in addition to calling in their Part B permit application on April 1, 1985. To date, Keystone has not submitted a Part B permit application and has responded to the Complaint and Compliance Order by submitting a pre-hearing package of documents, dated March 26, 1986 to USEPA, Region V. In the interim, USEPA referred the case to the Department of Justice on March 10, 1986. The DOJ's Office has submitted a draft civil action docket to USEPA, Region V for review. The civil suit will issue a permanent injunction to the facility to cease further discharge of hazardous waste and compliance with Subparts F, G and H of interim status standards must be established by the facility within 90 days of the filing of the suit. Keystone has not responded to the Solid Waste Management Unit Questionnaire, nor have they been able to certify for compliance with Subparts F, G, and H. A preliminary review of the information included with the documents submitted as part of the pre-hearing package, indicates that Keystone has installed six groundwater monitoring wells in the immediate vicinity of the ditches, holding ponds, and aeration basin as part of what appears to be a one-time demonstration to the Agency that no contamination

what  
are  
these?

has resulted from Keystone's K062 discharge activities. In addition, the IEPA's Division of Water Pollution Control has received a Construction Permit Application from Keystone which proposes a modification to their existing WWT Plant operations permitted under NPDES Permit No. IL0002526. The modification consists of installing a 500,000 gallon inground concrete basin for the collection of the plant's spent pickle liquor which will be pumped directly to the WWT Plant through an enclosed piping system. The proposal will eliminate the K062 wastewater discharge into the ditches in addition to eliminating the earthen aeration basin. However, no closure plan, as required by 35 IAC, Part 725, Subpart G is on file with the IEPA or USEPA, nor has one been recently submitted to the IEPA for review.

**Recommended Regional Approach.** The recommended regional approach for this facility is twofold in order to address both the RCRA and CERCLA units existing on-site. It is obvious that regulatory action will be necessary to bring this facility into compliance with RCRA regulations for the S04 (surface impoundments) and S03 (waste pile) storage areas, particularly, Subparts F, G, and H. It appears that Keystone is opting to get out from under RCRA by modifying the Wastewater Treatment Plant operations in a manner that will eliminate the K062 wastewater direct discharges into the earthen ditches, holding ponds and aeration basin that are currently classified as S04 hazardous waste process units under RCRA. As referenced earlier, Keystone has submitted a construction permit application for the installation of a 500,000 gallon in-ground concrete spent pickle liquor collection tank to be connected to the existing piping network leading from the ditches to the WWT Plant (Keystone intends to continue discharging other plant process wastewaters, i.e., cooling waters, storm water runoff, etc..., into the ditches as a separate waste stream segregated from the pickle liquor). Review of the application by the IEPA's Division of Water Pollution Control indicates that the modification is approvable pending concurrence from the Division of Land Pollution Control. DLPC's major concern regarding the WWT Plant modification is directed towards the proper closure of the ditches, holding ponds, aeration basin and waste piles, for which no closure plan currently exists, in addition to ensuring that spent pickle liquor will not be discharged to any earthen holding structures in the future. Subsequently, the IEPA is recommending that USEPA continue to pursue the Civil Suit action which will require proper closure of the facility under RCRA, while the IEPA issues the permit for the construction of the WWT Plant modifications with special conditions to ensure that no pickle liquor discharge to the ditches/holding ponds will be allowed.

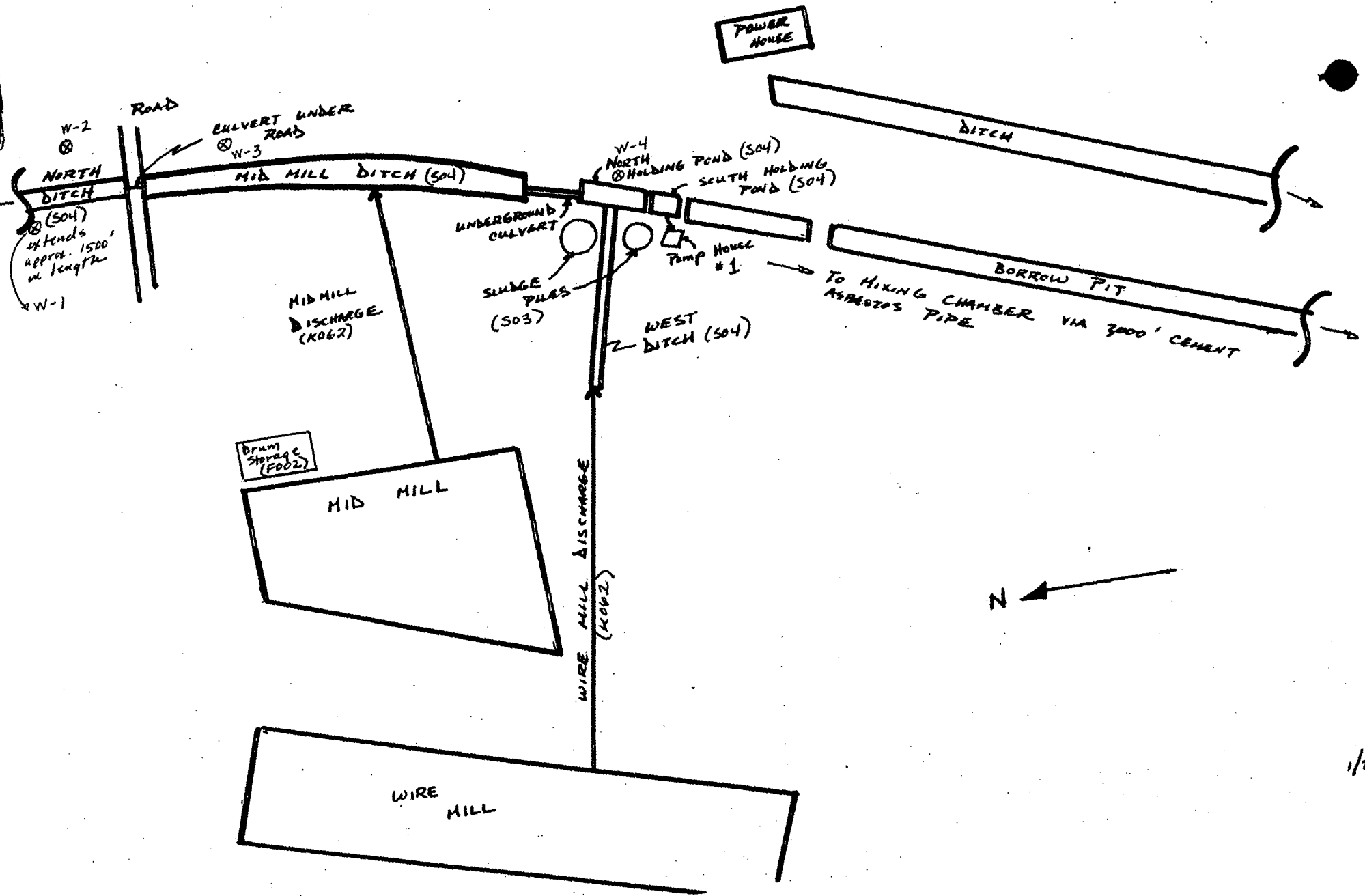
In regards to the pre-RCRA/CERCLA and Solid Waste Management Units that exist on-site, further investigation is warranted. Due to the size of the plant itself, which may contain pre-existing waste management units that have not been investigated, and the questions concerning past waste management practices, and due to the fact that Keystone has not responded to the Solid Waste Management Questionnaire, the IEPA recommends that a PA/SI be conducted under CERCLA by USEPA in order to rank the facility. It would be difficult to require Keystone to address the cleanup of these units under RCRA, due to consideration of their past RCRA Permit history and to the fact that they will be exempt from RCRA once the S04 and S03 hazardous waste storage units are closed and closure certified.

Refer to Bartonville / 12/1  
ILD 00714881

# FACILITY LAYOUT - NORTH END

ATTACHMENT 19-B1

Monitoring Well Location  
(W-1 and W-6 are upgradient; W-2,3,4  
and W-5 are downgradient)

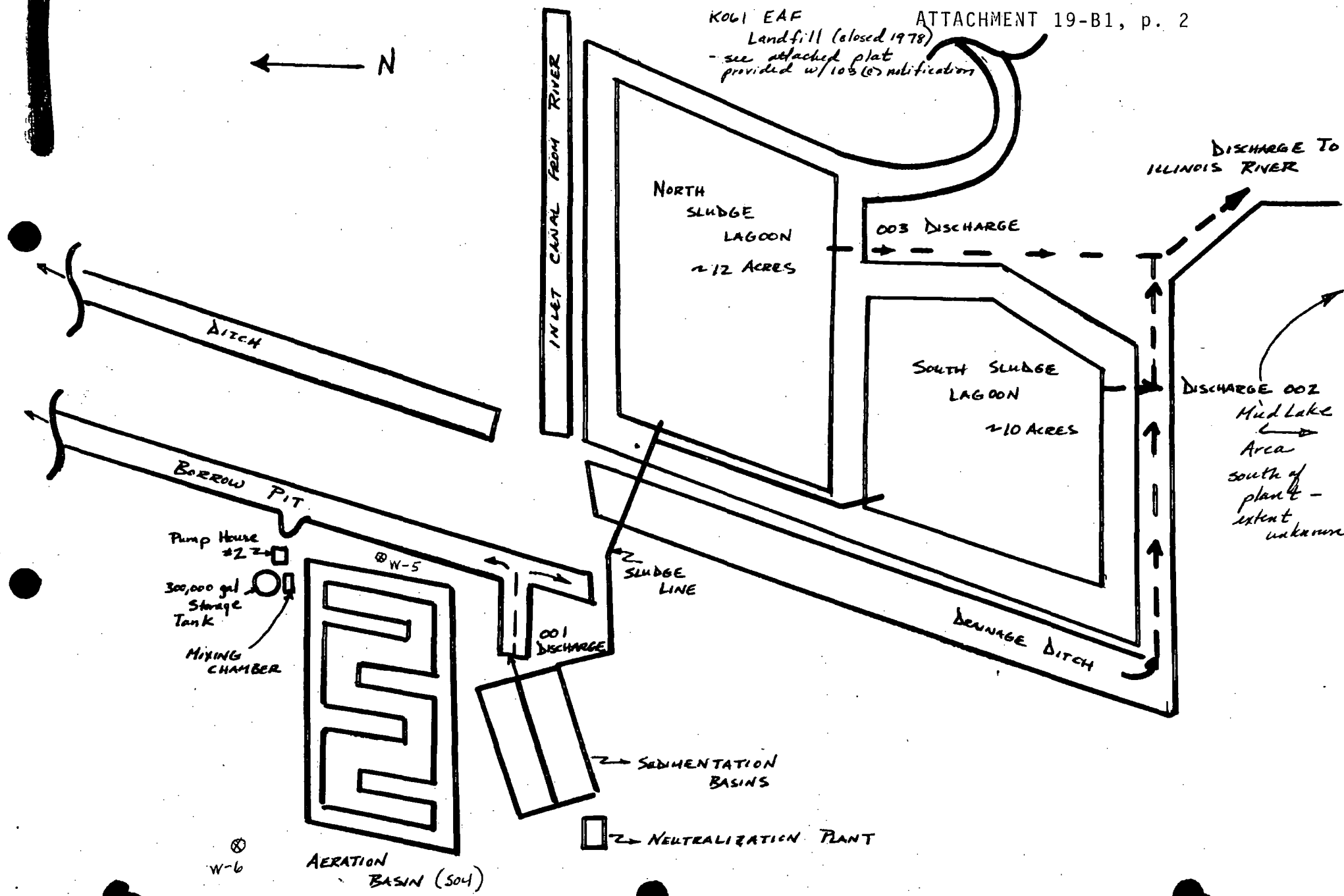


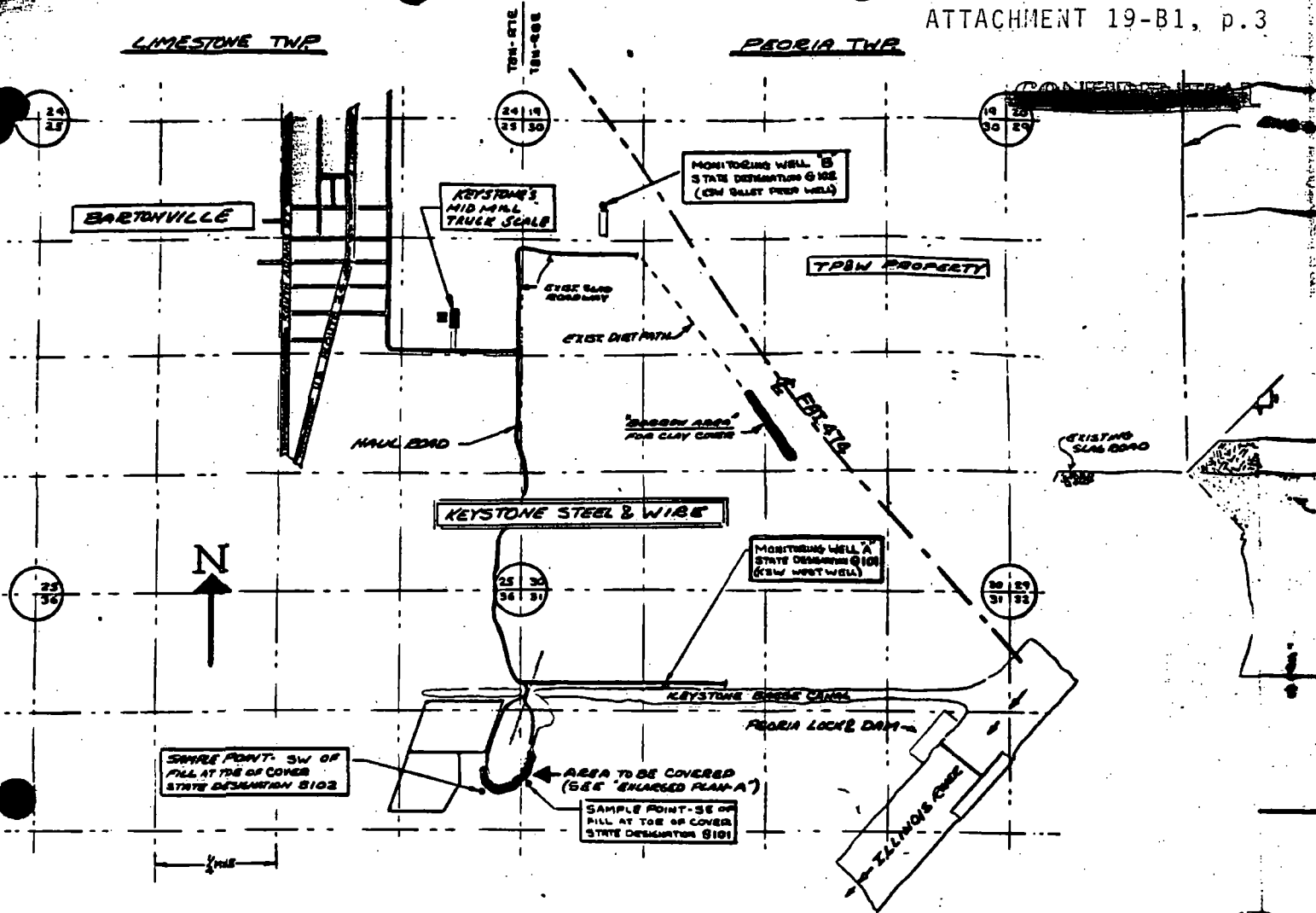
Refer to: 1430050001 - Peoria  
Bartonville / Keystone Steel Wire  
ILD 00714881

# FACILITY LAYOUT - SOUTH END

ATTACHMENT 19-B1, p. 2

KOL EAF  
Landfill (closed 1978)  
- see attached plat  
provided w/105 (07) notification





**SITE PLAN - PLAT OF LANDFILL COVER LOCATION** SCALE: 1" = 800'

PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 36, T.8N., R.7E. OF THE 4TH R.M., PEORIA CO., ILL.  
AND  
PART OF THE SW 1/4 OF THE NW 1/4 OF SECTION 31, T.8N., R.8E. OF THE 4TH R.M., PEORIA CO., ILL.

**RECEIVED**

NOV 22 1983

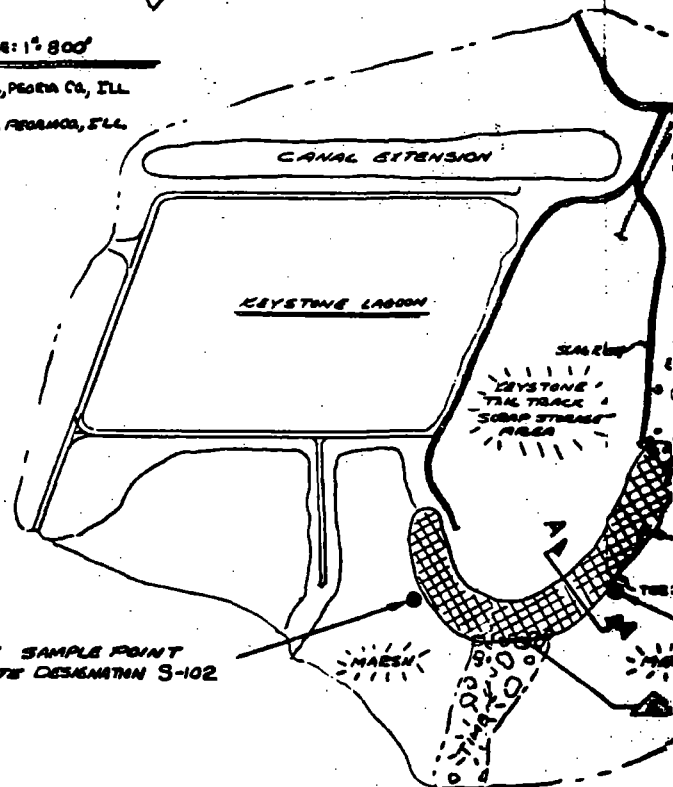
E.P.A. - D.L.P.C.  
STATE OF ILLINOIS

**RECEIVED**

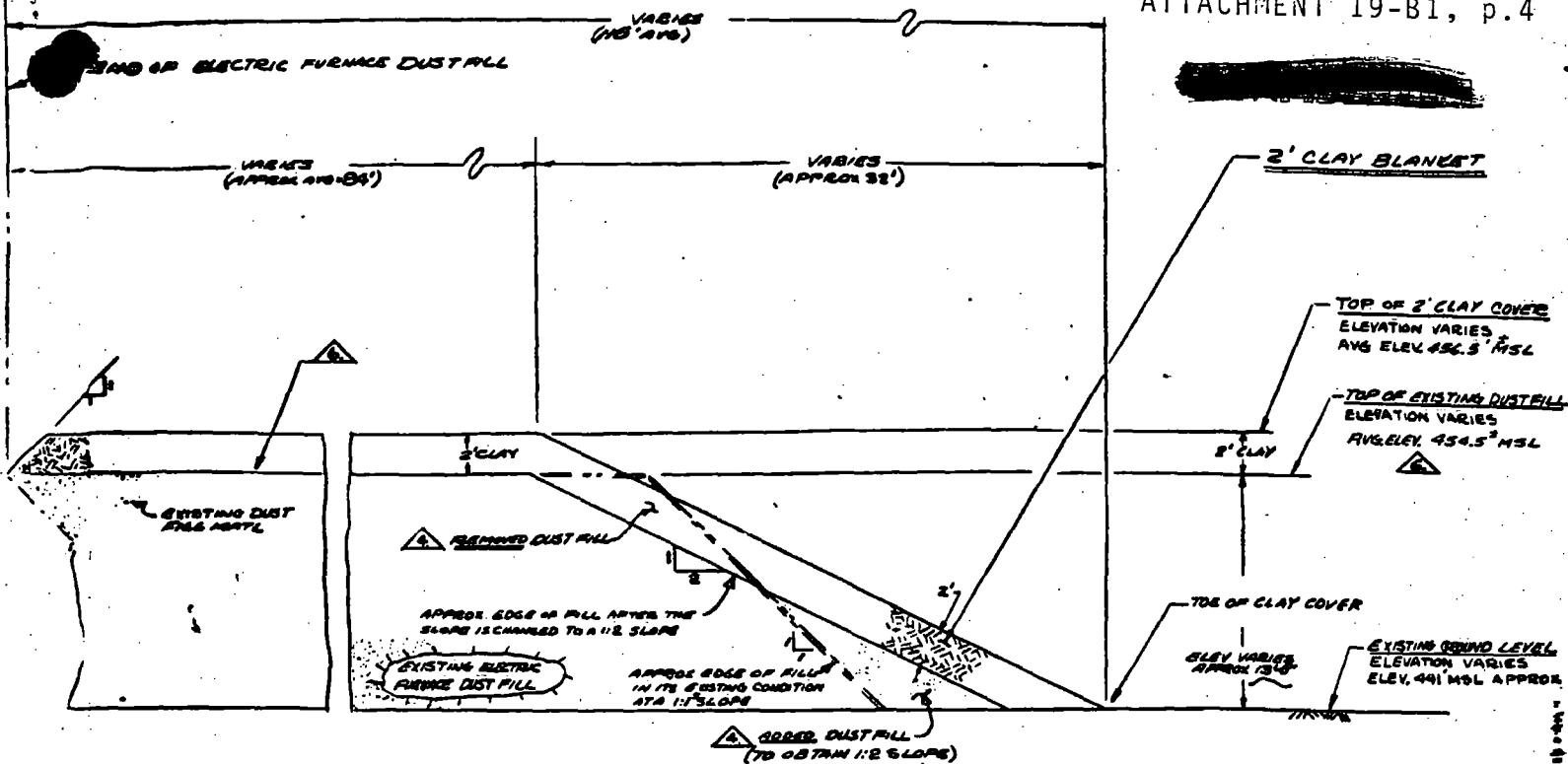
MAY 26 1981

E.P.A. - D.L.P.C.  
STATE OF ILLINOIS

SW SAMPLE POINT  
STATE DESIGNATION S-102

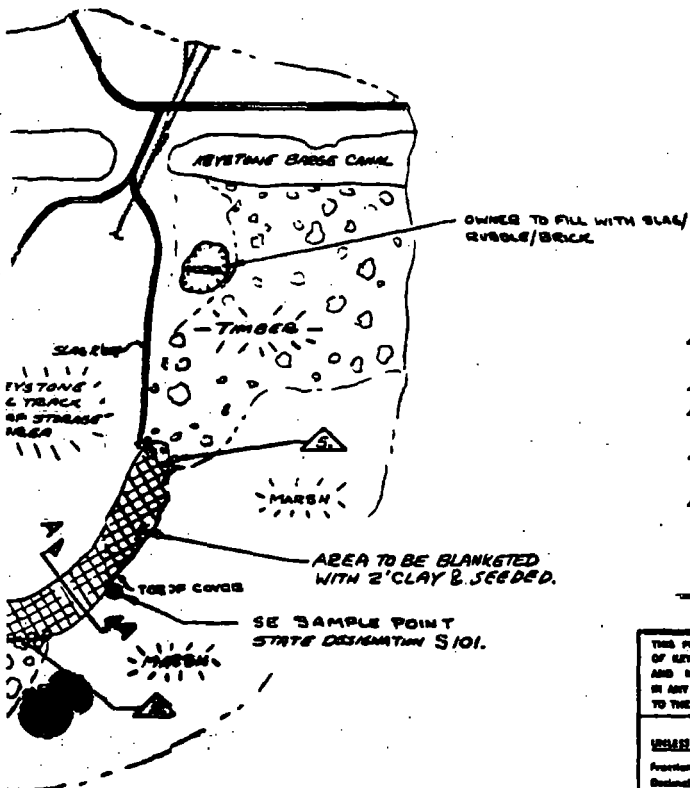


**ENLARGED PLAN - DETAIL**



SECTION A-A SCALE: 1/2"=1'-0"

TYPICAL CROSS-SECTION OF THE EXISTING FILL & THE NEW CLAY BLANKET



'LAN-DETAIL 'A' SCALE: 1"=200'


ESTIMATED QUANTITIES

CLAY FILL - 8,000 CUBIC YARDS

7. THIS COVER PLACED PER IEPA PERMIT #14300501 & FILED  
 (C) PEORIA CO. LAND RECORDERS OFFICE
- ⑥ CONTR. TO SMOOTH & SHAPE THE TOP SURFACE OF THE EXISTING DUST FILL BEFORE PLACING THE 2" THICK CLAY BLANKET.
  - ⑤ CONTR. TO REMOVE TREES & GRASS AS NECESSARY FOR CONSTRUCTION PURPOSES.
  - ④ CONTR. TO RESHAPE EXISTING SLOPE TO OBTAIN A MINIMUM SLOPE OF 1:2 BEFORE CLAY BLANKET IS CONSTRUCTED.
  - ③ THE ENTIRE CLAY BLANKETED AREA SHALL BE PREPARED, FERTILIZED, SEEDING & MULCHED ACCORDING TO SPECIFICATIONS.
  - ② CLAY BLANKET MATERIAL TO BE WELL COMPACTED IN 6" TO 12" LIFTS ON A MINIMUM SLOPE OF 1:2. CONTR. TO USE OWNERS CLAY MATL. AVAILABLE ON OWNERS PROP. CONTR. TO LOAD, Haul, PLACE & COMPACT
1. ALL ELEVATIONS ARE MEAN SEA LEVEL - MSL.

**NOTES:**

**NOTE: REPORT ALL ALTERATIONS TO ENGINEERING DEPT.**

THIS PRINT IS THE PROPERTY OF KEYSTONE STEEL & WIRE AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THEIR INTEREST.	REV.	DATE	BY	DESCRIPTION OF CHANGE	 <b>KEYSTONE STEEL AND WIRE - PLOREE, ILL. 61041</b> DIV. OF KEYSTONE CONSOLIDATED INDUSTRIES, INC. ENGINEERING DEPARTMENT
				① B-S-B DC MADE NECESSARY	
				REVISIONS TO REPLACE 6" SLAB COVER WITH STEELING.	
				2-2-79 2LB 42000 NOTR 7.	
<b>TOLERANCES</b>					DEPT. <b>STEEL WORKS GENERAL</b>
<b>USING CONVERSION FACTORS</b>					CLASS <b>ARC SHOP DUST DISPOSAL</b>
Fractional Dia. ± 1/64					NAME <b>TAIL TRACK LANDFILL COVER INSTALLATION</b>
Decimal Dia. ± .003					DR. <b>DLB</b> TR. <b>CK.</b> CK. <b>CK.</b>
Angular Dia. ± 1°					JOB # <b>136473</b>
<b>PLEASE CHECK CORNERS AND REMOVE ALL BURRS</b>					DATE <b>4-20-78</b>
<b>RETURN THIS PRINT UPON COMPLETION OF JOB</b>					RCH <b>NOTED</b> DATE <b>4-20-78</b> IN <b>100</b> REMAINING <b>77756</b>
				SERIAL NO.	

14300501 PEORIA CO.  
MORTONVILLE / KEYSTONE  
116329

SEMELROTH/BENNINGTON/CRAGER

DE DS EVC KB 6899-162

W  
Received  
from D. Bennington  
2-22-85  
Dansen  
FOS  
WB/11 1

PEORIA DISPOSAL RESPONSE COMPANY  
1113 N SWORDS AVENUE  
PEORIA, IL 61604

ATT- MR. TODD KENNING

SERVICE

NET 30	YOUR TRUCK	12/10/84	OUR PLANT	12/13/84
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FURNISH LABOR & MATERIALS NECESSARY TO LOAD 9 WASTE  
DRUMS INTO OVERPACKS, CLEAN UP CONTAMINATED SOIL,  
LOAD ONTO TRUCK TRANSPORT TO KEYSTONE TEMPORARY STORAGE  
SITE AT MID HILL.

(DRUMS LOCATED EAST CECO'S BUILDING - SOUTH OF  
MAIN OFFICE).

TRANSPORT AND DISPOSE OF BARRELS PER EPA REQUIREMENTS  
ONCE DISPOSAL PERMIT IS OBTAINED. KEYSTONE WILL LOAD  
ONTO PDC TRUCK AT MID HILL.

NOTE - PDC RESPONSE DATES APPLY.

NOT TO  
EXCEED  
\$6,000.00



P.D.C. LABORATORIES, INC.  
INDUSTRIAL WASTE ANALYTICAL SERVICES

1113 N. SWORDS AVENUE  
PEORIA, ILLINOIS 61604

(309) 676-4893

November 30, 1984

Dale Bennington  
Keystone Steel & Wire  
7000 S. W. Adams  
Peoria, IL 61641

1-11

Date: November 30, 1984

Sample #4P-566-574 & 638

INVOICE #: 1280

P.O.# W23561

WASTE NAME: Hazardous

Permit # —

Waste (ABANDONED BARRELS EAST  
OF CECOS & LAIDLAW)

Analysis	No.	Price Each	Extensions
IEPA Toxicity	9	\$303.00	\$2,727.00
PCB	1	90.00	<u>90.00</u>
			<u>\$2,817.00</u>

6962-303

Rev. 4/11/84  
rjt-t

1416  
D. Bennington  
D. Bennington  
D. Bennington  
11/8/85  
11/8/85  
11/8/85  
DATE: 11/8/85  
BY: 11/8/85